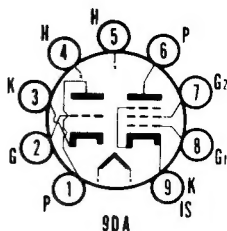


# **SYLVANIA TYPE 6AN8 6AN8A 5AN8**

**TRIODE PENTODE**



## **MECHANICAL DATA**

Bulb.....	T-6 1/2, Outline 6-2
Base.....	Small Button 9-Pin
Basing.....	9DA
Mounting Position.....	Any

## **ELECTRICAL DATA**

HEATER CHARACTERISTICS	5AN8	6AN8A	6AN8
Heater Voltage.....	4.7	6.3	6.3 Volts
Heater Current.....	600	450	450 Ma
Heater Warm-up Time.....	11	11	Seconds
Maximum Heater-Cathode Voltage			
Total D C and Peak.....			200 Volts
D C, Heater Positive with Respect to Cathode.....			100 Volts

## **DIRECT INTERELECTRODE CAPACITANCES (Unshielded)**

### **Triode Section**

Grid to Plate.....	1.5 $\mu$ f
Input.....	2.0 $\mu$ f
Output.....	0.26 $\mu$ f

### **Pentode Section**

Grid No. 1 to Plate.....	0.04 $\mu$ f	Max
Input.....	7.0 $\mu$ f	
Output.....	2.4 $\mu$ f	
Triode Grid to Pentode Plate.....	.02 $\mu$ f	
Pentode Grid No. 1 to Triode Plate.....	.02 $\mu$ f	
Pentode Plate to Triode Plate.....	0.15 $\mu$ f	

## **MAXIMUM RATINGS (Design Maximum Values)**

	Triode	Pentode
Plate Voltage.....	330	330 Volts
Grid No. 2 Supply Voltage.....		330 Volts
Grid No. 2 Voltage.....	See Rating Chart for Type 6AM8	
Positive Grid No. 1 Voltage.....	0	0 Volts
Plate Dissipation.....	2.8	2.3 Watts
Grid No. 2 Input.....		0.55 Watt
Grid No. 1 Circuit Resistance <sup>1</sup>		
Cathode Bias.....	1.0	1.0 Megohm
Fixed Bias.....	0.5	0.25 Megohm

## **CHARACTERISTICS**

	Triode	Pentode
Plate Supply Voltage.....	150	125 Volts
Grid No. 2 Supply Voltage.....		125 Volts
Grid No. 1 Voltage.....	-3	Volts
Cathode Bias Resistor.....		56 Ohms
Plate Current.....	15	12 Ma
Grid No. 2 Current.....		3.8 Ma
Amplification Factor.....	21	
Plate Resistance (approx.).....	4700	170,000 Ohms
Transconductance.....	4500	7800 $\mu$ mhos
Grid No. 1 Voltage for $I_b = 20 \mu$ a (approx.).....	-17	-6 Volts
$I_b$ at ECI = -3 Volts, RK = 0.....		1.6 Ma

## **NOTE:**

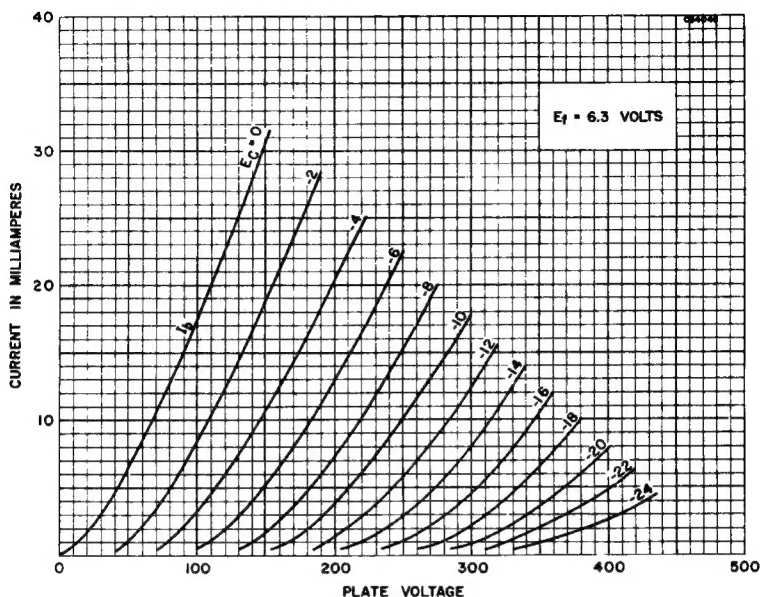
1. If either section is operating at maximum rated conditions, the grid No. 1 circuit resistance for both sections should not exceed the stated values.

## **APPLICATION**

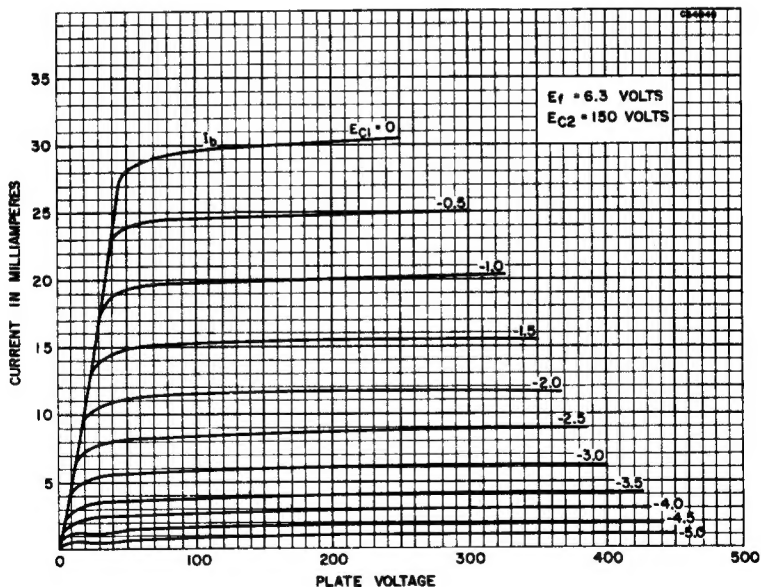
Sylvania Types 6AN8, 6AN8A and 5AN8 are medium- $\mu$  triodes and sharp cutoff pentodes contained in a 9-pin, miniature envelope. The pentode section may be used as an i f amplifier, video amplifier, a g c amplifier and reactance tube. The triode is well suited for use in low frequency oscillator, sync clipper, sync separator and phase splitter circuits.

# 6AN8, 6AN8A, 5AN8 (Cont'd)

## AVERAGE PLATE CHARACTERISTICS TRIODE SECTION

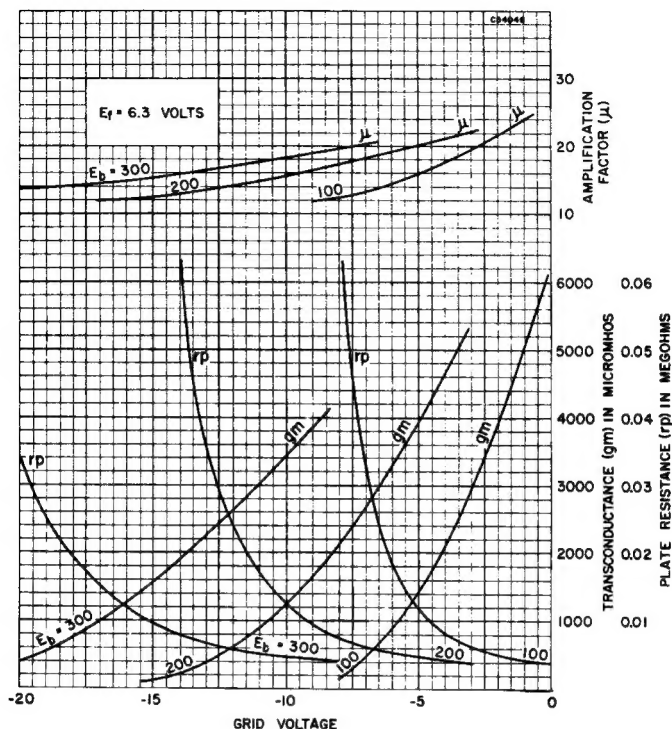


## AVERAGE PLATE CHARACTERISTICS PENTODE SECTION



# 6AN8, 6AN8A, 5AN8 (Cont'd)

## AVERAGE TRANSFER CHARACTERISTICS TRIODE SECTION



## AVERAGE TRANSFER CHARACTERISTICS PENTODE SECTION

